

No.

9100212



THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME;

Nunhems Seed Corporation

**Whereas, THERE HAS BEEN PRESENTED TO THE
Secretary of Agriculture**

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED NOVEL VARIETY OF SEXUALLY REPRODUCED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF *eighteen* YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, IMPORTING IT, OR EXPORTING IT, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT (T. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

BEAN

'Fesca'

*In Testimony Whereof, I have hereunto set
my hand and caused the seal of the Plant
Variety Protection Office to be affixed
at the City of Washington, D.C.
this 31st day of January in
the year of our Lord one thousand nine
hundred and ninety-two.*

Attest:

Kenneth A. Evans
Commissioner
Plant Variety Protection Office
Agricultural Marketing Service

Edward Madigan
Secretary of Agriculture

U.S. DEPARTMENT OF AGRICULTURE
 AGRICULTURAL MARKETING SERVICE

FORM APPROVED: OMB NO. 0581-0055

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

(Instructions on reverse)

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

1. NAME OF APPLICANT(S) Nunhems Seed Corporation		2. TEMPORARY DESIGNATION Nun 7324	3. VARIETY NAME Fesca
4. ADDRESS (Street and No. or R.F.D. No., City, State, and Zip Code) 221 East Main St. Lewisville, ID 83431		5. PHONE (Include area code) (208) 754-8666	FOR OFFICIAL USE ONLY PVPO NUMBER 9100212
6. GENUS AND SPECIES NAME <u>Phaseolus vulgaris</u>	7. FAMILY NAME (Botanical) <u>Leguminosae</u>		FILING DATE <u>July 12, 1991</u> TIME _____ <input type="checkbox"/> A.M. <input type="checkbox"/> P.M.
8. KIND NAME Garden Snap Bean	9. DATE OF DETERMINATION 12-1-90		FEES RECEIVED AMOUNT FOR FILING \$ <u>2150.-</u> DATE <u>April 1, 1991</u> AMOUNT FOR CERTIFICATE \$ <u>250.-</u> DATE <u>Dec. 31, 1991</u>
10. IF THE APPLICANT NAMED IS NOT A "PERSON," GIVE FORM OF ORGANIZATION (Corporation, partnership, association, etc.) Corporation			12. DATE OF INCORPORATION Feb. 14, 1936
11. IF INCORPORATED, GIVE STATE OF INCORPORATION Delaware			

13. NAME AND ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION AND RECEIVE ALL PAPERS
 Hank Mende
 Nunhems Seed Corp.
 221 East Main St.
 Lewisville, ID 83431
 PHONE (Include area code): (208) 754-8666

14. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED

- a. Exhibit A, Origin and Breeding History of the Variety (See Section 52 of the Plant Variety Protection Act.)
- b. Exhibit B, Novelty Statement.
- c. Exhibit C, Objective Description of Variety (Request form from Plant Variety Protection Office.)
- d. Exhibit D, Additional Description of Variety.
- e. Exhibit E, Statement of the Basis of Applicant's Ownership.

15. DOES THE APPLICANT(S) SPECIFY THAT SEED OF THIS VARIETY BE SOLD BY VARIETY NAME ONLY AS A CLASS OF CERTIFIED SEED? (See Section 83(a) of the Plant Variety Protection Act.)
 Yes (If "Yes," answer items 16 and 17 below) No

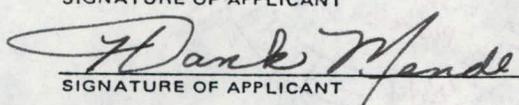
16. DOES THE APPLICANT(S) SPECIFY THAT THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS?
 Yes No

17. IF "YES" TO ITEM 16, WHICH CLASSES OF PRODUCTION BEYOND BREEDER SEED?
 Foundation Registered Certified

18. DID THE APPLICANT(S) PREVIOUSLY FILE FOR PROTECTION OF THE VARIETY IN THE U.S.?
 Yes (If "Yes," give date)
 No

19. HAS THE VARIETY BEEN RELEASED, OFFERED FOR SALE, OR MARKETED IN THE U.S. OR OTHER COUNTRIES?
 Yes (If "Yes," give names of countries and dates)
 No
 The Netherlands, 1990

20. The applicant(s) declare(s) that a viable sample of basic seeds of this variety will be furnished with the application and will be replenished upon request in accordance with such regulations as may be applicable.
 The undersigned applicant(s) is (are) the owner(s) of this sexually reproduced novel plant variety, and believe(s) that the variety is distinct, uniform, and stable as required in Section 41, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act.
 Applicant(s) is (are) informed that false representation herein can jeopardize protection and result in penalties.

SIGNATURE OF APPLICANT 	DATE 27 MARCH 1991
SIGNATURE OF APPLICANT	DATE

INSTRUCTIONS

General: Send an original copy of the application and exhibits, at least 2,500 viable seeds (*furnish only untreated seed*), and \$1,800 fee (\$200 filing fee and \$1,600 examination fee) to the U. S. Department of Agriculture, Agricultural Marketing Service, Plant Variety Protection Office, National Agricultural Library Building, Beltsville, Maryland 20705. (See Section 180.175 of the Regulations and Rules of Practice.) Retain one copy for your files. All items on the face of the form are self-explanatory unless noted below.

Item

- 9 Give the date the applicant determined that he had a new variety based on (1) the definition in Section 41(a) of the Act and (2) the date a decision was made to increase the seed.
- 14a Give: (1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method; (2) the details of subsequent stages of selection and multiplication; (3) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified and (4) evidence of uniformity and stability.
- 14b Give a summary statement of the variety's novelty. Clearly state how this novel variety may be distinguished from all other varieties in the same crop. If the new variety most closely resembles one or a group of related varieties: (1) identify these varieties and state all differences objectively; (2) attach statistical data for characters expressed numerically and demonstrate that these are clear differences; and (3) submit, if helpful, seed and plant specimens or photographs of seed and plant comparisons clearly indicating novelty.
- 14c Fill in the Exhibit C, Objective Description form, for all characteristics for which you have adequate data.
- 14d Describe any additional characteristics that are not described, or whose description cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the description of characteristics that are difficult to describe, such as plant habit, plant color, disease resistance, etc.
- 14e Section 52(4) of the Plant Variety Protection Act requires applicants to furnish a statement of the basis of the applicant's ownership. The applicant may be the actual breeder, the employer of the breeder, the owner through purchase or inheritance, etc.
- 15 If "Yes" is specified (*seed of this variety be sold by variety name only as a class of certified seed*) the applicant may **NOT** reverse his affirmative decision after the variety has either been sold and so labeled, his decision published, or the certificate has been issued. However, if the applicant specified "No," he may change his choice. (See Section 180.16 of the Regulations and Rules of Practice.)
- 19 See Sections 41 (i,j) and 42 of the Plant Variety Protection Act and Section 180.7 of the Regulations and Rules of Practice for eligibility requirements.
- NOTE: All information submitted in support of an application becomes PUBLIC INFORMATION once the certificate is issued. (See Section 180.17 of the Regulations and Rules of Practice.)

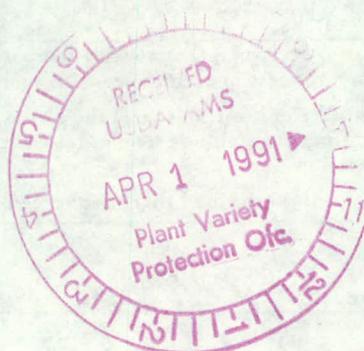


Exhibit A: Origin and Breeding History

Fesca was selected from the three-way cross as follows:
(Oregon 1604 x Groffy (F₁)) x Slenderette.

Oregon 1604 is a Bush Blue Lake bean with high yield potential and early maturity. It is resistant to Bean common mosaic virus strain 1 (BCMV1) and New York 15 (NY15) strain. It also has halo blight (Pseudomas syringae pv. phaseolicola) tolerance. Groffy is a bush Tenderpod type developed by Nunhems Zaden of Haelen, The Netherlands. This variety has a medium sieve size and length pod. It is resistant to BCMV1 and NY15 strains. It is also resistant to Anthracnose (Colletotrichum lindemuthianum). Slenderette is a variety developed by Musser Seed company. This variety is a Tenderpod, upright bush type. The pods are a medium green color and are longer, smooth, and smaller sieve than Groffy. The variety is resistant to BCMV1 and NY15 strain. It is also resistant to Curly Top virus.

The cross was made in 1983 by Nunhems Zaden, Netherlands bean breeding personnel. The F₁ and F₂ generations were grown in the greenhouse. Single plant selections were made in the F₂, and generation advance from that point was made using the pedigree method. Disease resistance evaluations for Anthracnose and Halo Blight were made in the F₃ and F₅ generations. The lines were grown in the greenhouse and open field with the final bulk being made in the F₉ generation in 1987. The experimental number assigned to this variety was Nun 7324. It was exposed to Curly Top virus in 1988. All three parents are resistant to BCMV1 and NY15 strain, so no specific test was needed, however no susceptible plants were observed during cultivation. Performance evaluations were made in 1988 and 1989. Variety introduction was initiated in 1990 with commercial samples distributed with no charge.

The variety appears to be stable with no apparent off-types.

Exhibit B: Novelty Statement

Fesca has an upright bush plant type. The plant has medium color foliage with a canopy height of 16-18 inches and width of 22-24 inches. The pods are located in the middle to upper portion of the canopy. Most of the pods are located internally in the canopy. The plants have good tolerance to lodging. Pods are round to slightly creaseback in cross section and about 6 1/2 inches long. At maturity about 25% of the beans are in the 5-7 sieve range. Internal seed development is slow with a 10 seed length of 75 mm at maturity. The variety is resistant to BCMV1, NY15 strain, Halo Blight, Curly Top virus, and Anthracnose.

Fesca differs from its parents as follows. Fesca is a Tenderpod type while Oregon 1604 is a Blue Lake type. Fesca has a pod of 6 1/2 inches long while Groffy has a 4 1/2 inch pod. Fesca also has Curly Top resistance which Groffy does not. Fesca has Halo Blight and Anthracnose resistance while Slenderette is susceptible. Also, Slenderette has 100% of the pod in the sieve range 1-4 while Fesca has 75%.

The commercial variety of greatest similarity is Asgrow's Labrador. Fesca differs from Labrador in being larger sieved (25% 5-7 sieve versus 10%); longer podded (6 1/2 inch versus 5 1/2 inch); and resistance to Curly Top virus and Halo Blight while Labrador is susceptible.

Fesca is also very similar to its sister line Modus. The main difference is that Fesca has resistance to Anthracnose while Modus does not. In addition, Fesca has a slightly longer pod, larger sieve, and two day later maturity.

U.S. DEPARTMENT OF AGRICULTURE
 AGRICULTURAL MARKETING SERVICE
 LIVESTOCK, POULTRY, GRAIN & SEED DIVISION
 BELTSVILLE, MARYLAND 20705

EXHIBIT C
 (Bean)

OBJECTIVE DESCRIPTION OF VARIETY
 BEAN (*Phaseolus vulgaris* L.)

NAME OF APPLICANT(S) Nunhems Seed Corporation ADDRESS (Street and No. or R.F.D. No., City, State, and Zip Code) 221 East Main St. Lewisville, ID 83431	FOR OFFICIAL USE ONLY PVPO NUMBER 2100212
	VARIETY NAME OR TEMPORARY DESIGNATION Nun 7324

Place numbers in the boxes (e.g.) for the characters that best describe this variety. Measured data should be for SPACED PLANTS. Ranges may also be given. Royal Horticultural Society or any recognized color standard may be used to determine plant colors; designate system used: _____ . The location of test area is _____ . Please answer questions appropriate for your variety if the information is available.

1. TYPE:

1 = Field (dry-edible) 2 = Garden

2. MARKET MATURITY:

<input type="text" value="7"/> <input type="text" value="0"/> Days to edible pods	<input type="text"/> <input type="text"/> Days to green shells
<input type="text"/> <input type="text"/> <input type="text"/> Days to dry seeds	
<input type="text" value="1"/> <input type="text" value="3"/> <input type="text" value="9"/> <input type="text" value="0"/> Heat units to edible pods	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> Heat units to green shells
<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> Heat units to dry seeds	
<input type="text"/> <input type="text"/> No. days earlier than	1 = Tendercrop 3 = Kinghorn Wax 5 = Michelite 62 7 = Bush Blue Lake 290 2 = Kentucky Wonder 4 = White Kidney 6 = Dwarf Horticultural 8 = Other (specify below) <u>Slenderette</u> 9 = Labrador
..... Same as ... <input type="text" value="8"/>	
<input type="text" value="0"/> <input type="text" value="1"/> No. days later than	

3. PLANT:

1 = Determinate 2 = Indeterminate

<input type="text" value="0"/> <input type="text" value="4"/> <input type="text" value="7"/> cm height	
<input type="text" value="0"/> <input type="text" value="2"/> cm shorter than	comparison variety from above Same as ... <input type="text" value="9"/> <input type="text" value="8"/>
..... cm taller than	
<input type="text" value="6"/> <input type="text" value="0"/> cm spread	
<input type="text" value="0"/> <input type="text" value="0"/> <input type="text" value="8"/> Number primary branches near base	
<input type="text"/> <input type="text"/> cm narrower than	comparison variety from above width same as ... <input type="text" value="2"/> <input type="text" value="8"/>
..... cm wider than	
<input type="text" value="0"/> <input type="text" value="6"/> cm wider than	
<input type="text" value="2"/> Main stalk: 1 = brittle 2 = wirey	<input type="text" value="2"/> Branching habit: 1 = compact 2 = open
<input type="text" value="1"/> 1 = stout 2 = thin	

3. PLANT: (Cont'd)

2 Pod position: 1 = low 2 = high 3 = scattered

4 Bush form (illustrated below):



1 = spherical bush form

2 = stem bush form

3 = wide bush form

4 = high bush form

5 = other (specify) _____

4. LEAVES:

2 1 = smooth 2 = wrinkled

1 1 = dull 2 = glossy

2 Size: 1 = small (Earliwax) 2 = medium 3 = large (Tendercrop)

2 Color: 1 = light green (as light or lighter than Bountiful) 2 = medium green
3 = dark green (as dark or darker than Bush Blue Lake 290)

5. FLOWERS:

1 Color: 1 = white 2 = cream 3 = pink 4 = lilac 5 = purple .6 = Other (specify) _____

3 7 Days to 50% bloom

6. FRESH PODS: (Edible maturity, average for 20 pods)

2 Exterior color: 1 = light green (as light or lighter than Bountiful)
2 = medium green
3 = dark green (as dark or darker than Bush Blue Lake 290)
4 = light yellow (Brittlewax)
5 = golden yellow (Cherokee Wax)
6 = green-red variegated (Horticultural)
7 = other (specify) _____

% Sieve size distribution at optimum maturity for non-flat pods

Note:

- 1 = 4.76 mm to 5.76 mm
- 2 = 5.76 mm to 7.34 mm
- 3 = 7.34 mm to 8.34 mm
- 4 = 8.34 mm to 9.53 mm
- 5 = 9.53 mm to 10.72 mm
- 6 = 10.72 mm or larger

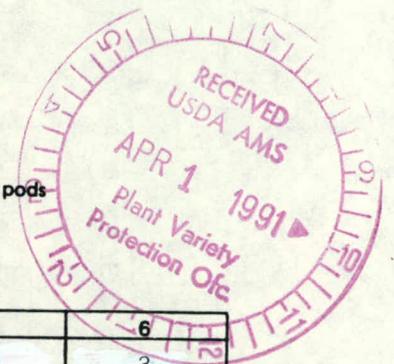
1	2	3	4	5	6
---	---	39	31	27	3

3 sieve 1 2 cm length 8 mm width 8 mm thickness

4 sieve 1 3 cm length 9 mm width 9 mm thickness

5 sieve 1 4 cm length 1 0 mm width 1 0 mm thickness

6 sieve cm length mm width mm thickness



6. FRESH PODS: (Cont'd)

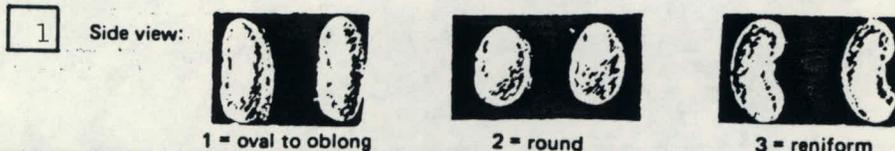
- 3 Cross section pod shape: 1 = flat 2 = oval 3 = round 4 = heart
- 1 Creaseback: 1 = present 2 = absent
- 2 Pubescence: 1 = none 2 = sparse 3 = considerable
- 2 Spur: 1 = straight 2 = slightly curved 3 = curved
- 1 Constrictions: 1 = none 2 = slight 3 = deep
- 2 Pod flesh: 1 = light 2 = medium 3 = dark
- 1 0 mm spur length
- 2 Fiber: 1 = none 2 = sparse 3 = considerable
- 6 Number of seeds per pod
- 1 Surface: 1 = smooth 2 = rough
- 2 Suture string: 1 = present 2 = absent
- 1 Seed development (Snap Bean): 1 = slow 2 = medium 3 = fast
- 1 Machine harvest: 1 = adapted 2 = not adapted
- 1 Pod flavor: (1) Standard (Tendercrop)
 (2) Mild Blue Lake (BBL 274)
 (3) Strong Blue Lake (Pole FM1)
 (4) Mild Romano (Roma)
 (5) Strong Romano (Pole Romano)
 (6) Other (specify) _____

7. SEED COAT COLOR:

- 1 1 = Monochrome 2 = Polychrome 2 1 = shiny 2 = dull
- 1 Primary color: } 1 = white 2 = yellow 3 = buff 4 = tan
- 1 Secondary color: } 5 = brown 6 = pink 7 = red 8 = purple
 9 = blue 10 = black 11 = other (specify) _____
- 1 Color Pattern: 1 = none 2 = splashed 3 = mottled 4 = striped 5 = flecked 6 = dotted
- Secondary color location: 1 = hilar ring 2 = ventral surface
 3 = sides 4 = dorsal surface
 5 = not restricted to any area 6 = combination of location (specify below) _____
- 1 Hilar ring on colored seeds: 1 = absent 2 = narrow 3 = butterfly shaped

8. SEED SHAPE AND SIZE:

- 1 Hilum view: 1 = elliptical 2 = oval 3 = round
- 2 Cross section: 1 = elliptical 2 = oval 3 = cordate 4 = round



8. SEED SHAPE AND SIZE: (Cont'd)

2 1 = truncate ends 2 = rounded ends

3 0 gm/100 seed

gm/100 seed lighter than

gm/100 seed same as

gm/100 seed heavier than

comparison variety from page one

9. ANTHOCYANIN: (1 = absent 2 = present)

1 Flowers

1 Stems

1 Pods

1 Seeds

1 Leaves

10. DISEASE RESISTANCE (0 = not tested 1 = susceptible 2 = resistant):

2 Anthracnose (specify race below) _____

0 Rust (specify race below) _____

0 Powdery mildew

0 Fusarium root rot

0 Pythium root rot

0 Rhizoctonia root rot

0 Pythium wilt

0 Angular leaf spot

0 Bacterial wilt

2 Halo blight (specify race below) _____

0 Fuscos blight

0 Red node virus

0 Pod mottle virus

2 Bean common mosaic virus (specify strain below)
Dominant gen I, BCMV₁&NY15

2 Mosaic mottle

1 Black root

2 Bean yellow mosaic virus

2 Curly top

Other (specify below) _____

11. INSECT RESISTANCE: (0 = not tested 1 = susceptible 2 = resistant)

0 Aphids

0 Leaf hopper

0 Lygus

0 Pod borer

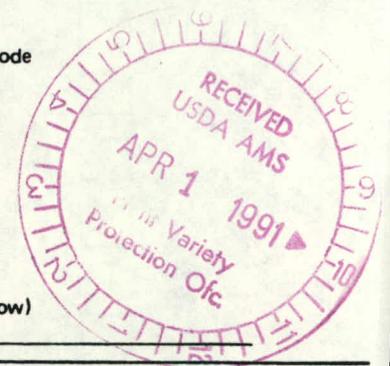
0 Root knot nematode

0 Seed corn maggot

0 Thrips

0 Weavils

Other (specify below) _____



12. PHYSIOLOGICAL RESISTANCE: (0 = not tested 1 = susceptible 2 = resistant)

1 Heat

0 Cold

0 Drought

0 Air pollution

13. COMMENTS:

Exhibit E: Statement of the Basis of Applicant's Ownership

Fesca was bred and developed solely by Nunhems Zaden, B.V. of Haelen, The Netherlands. Nunhems Seed Corporation (formerly Cannors Seed Corporation) was purchased December, 1987 by Nunhems Zaden. Thus, Nunhems Seed Corporation is wholly owned by Nunhems Zaden and represents Nunhems Zaden in the U.S.A. and Canada.

910021Z



nunhems

Nunhems Seed Corporation
P.O. Box 18
221 E. Main St.
Lewisville, ID 83431
Phone: 208-754-8666
Fax: 208-754-8669

12 December, 1995

Plant Variety Protection Office
NAL Building Room 500
10301 Baltimore Blvd.
Beltsville, MD 20705-2351

Attention: Marsha Stanton, Ph D

Dear Dr. Stanton:

Please be advised that Nunhems Seed Corporation will be liquidated effective 31 December, 1995.

This being the case; we wish to transfer the following PVP registrations to our parent company in Holland. The following is the new assignee:

Nunhems Zaden B.V.
P.O. Box 4005
6080AA Haelen
The Netherlands
Attention: Lex Welles

The varieties to be assigned are as follows:

PVP Registration #	Variety	Kind	Year of Expiration
8200169	77 EP	Pea	2001
9300078	Scepter	Pea	2013
9300079	Captain	Pea	2013
8700051	9000 F	Pea	2005
8900230	Applause	Pea	2010
9300076	Point	Pea	2013
8900222	Ava	Pea	2010
9400082 (Pending)	Targhee	Pea	
7800059	9888 F	Pea	1996
9100213	Modus	Bean	2010
9100212	Fesca	Bean	2010

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RECEIVED
USDA-AMS-PVPD

Our understanding is that the fee for transfer of ownership is \$25.00 per variety. Enclosed please find our check in the amount of \$275.00.

Please cancel PVP rights on the following registrations effective 31 December, 1995.

8000065, 7600015, 7500104, 7500090, 8000064, 7800060,
7600013, 7600016, 7800061, 8900224, 8900225, 8900223,

Yours truly,

Hank Mende
Director of Administration